500,000

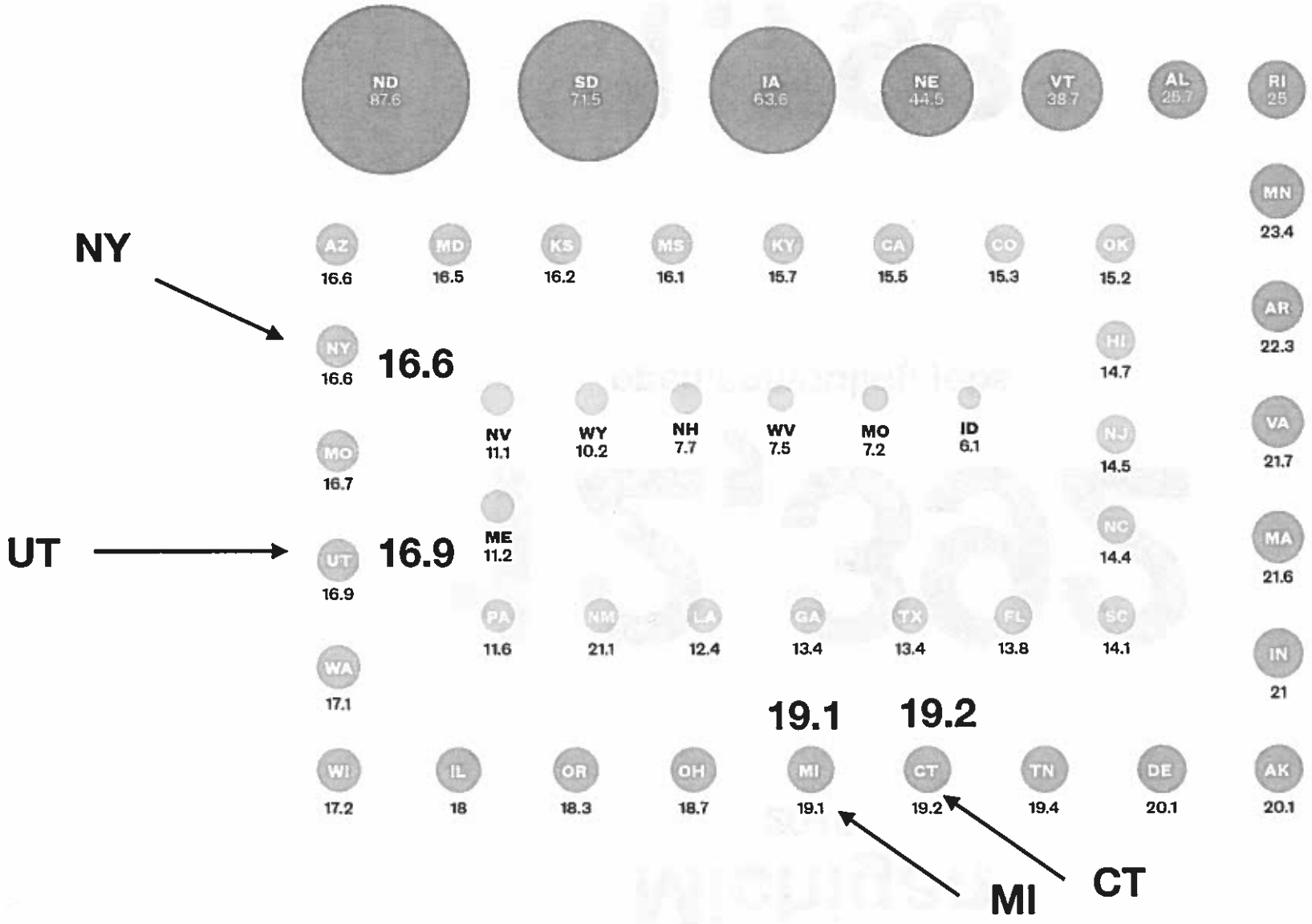
2.27M

by 2020

Source: National Institute of Standards and Technology.

NUMBER OF STEM JOBS ADVERTISED ONLINE FOR EACH UNEMPLOYED STEM WORKER, BY STATE, 2015

newamericaneconomy.org



Michigan

2015

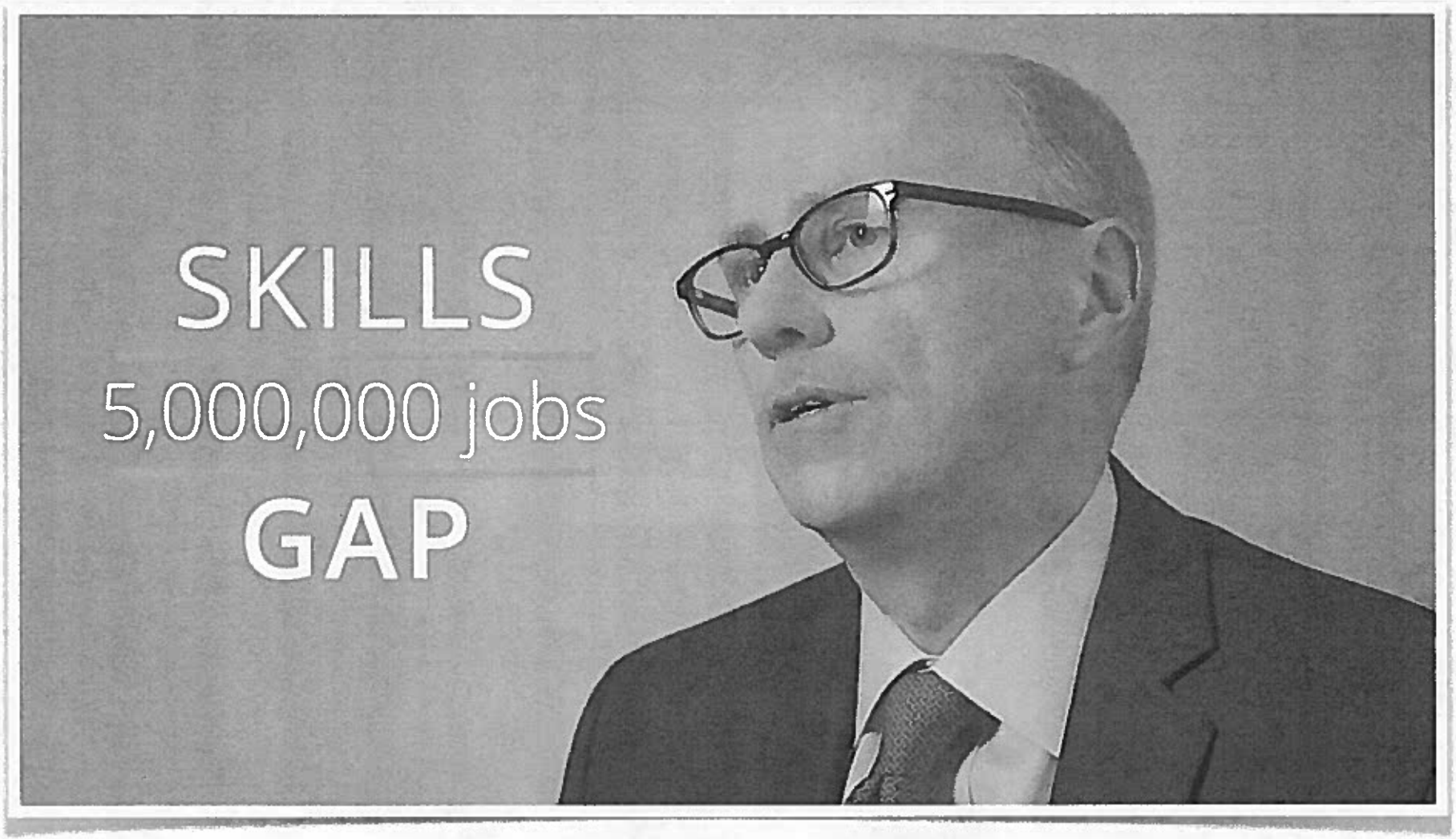
12,392

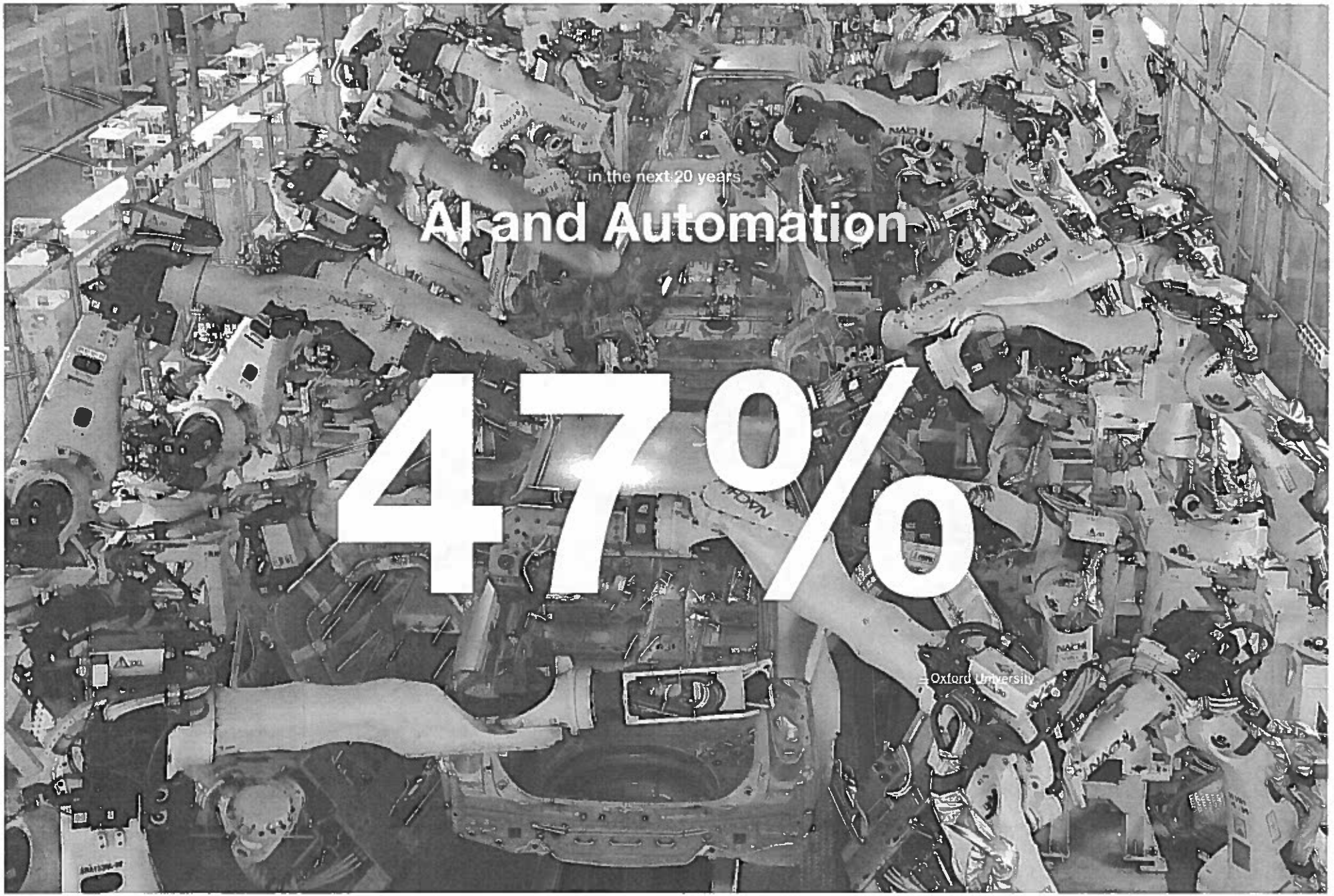
open computing jobs

1,793

computer science graduates

Sources: The Conference Board, National Center for Education Statistics, and the College Board. More info.

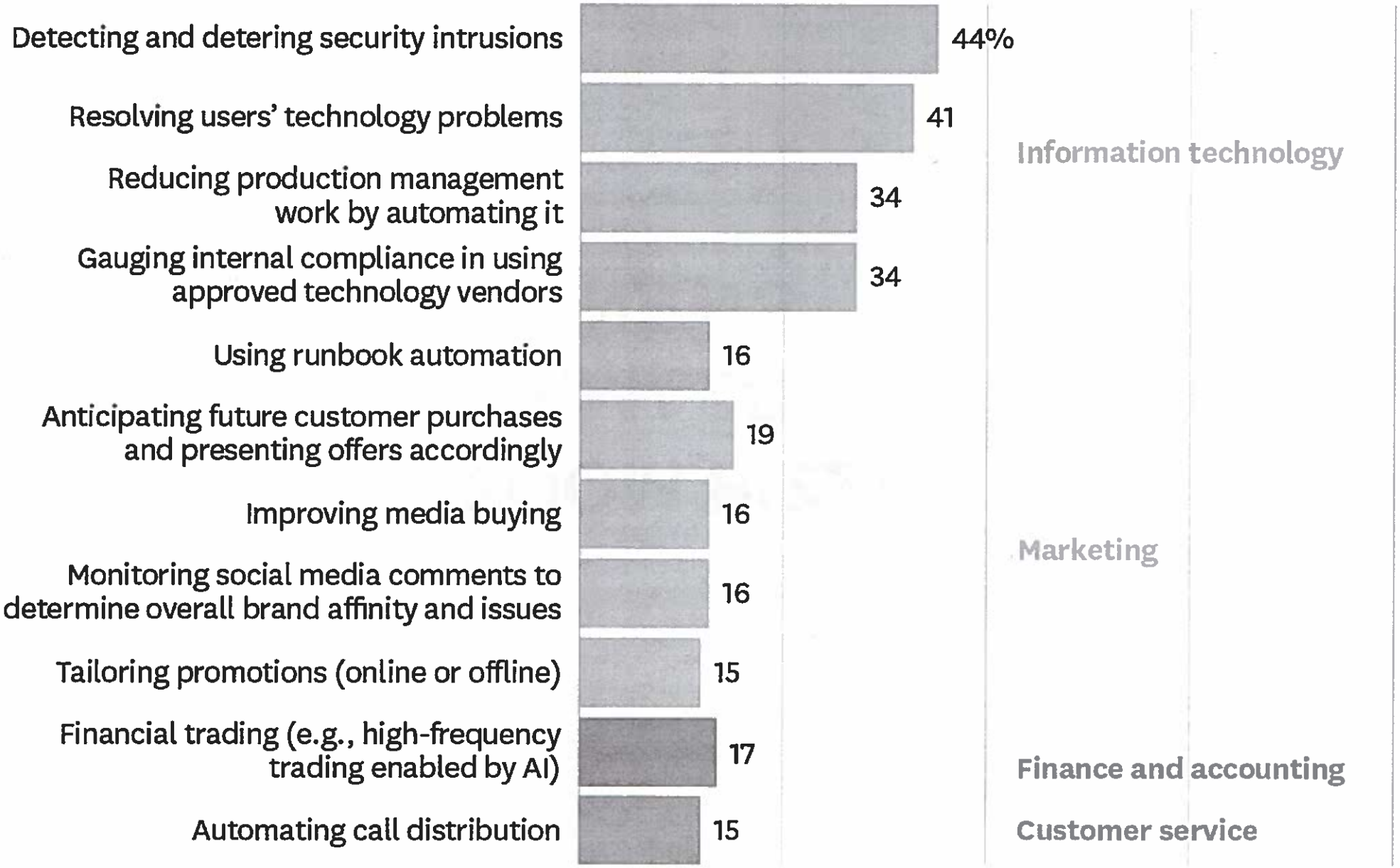

SKILLS
5,000,000 jobs
GAP


in the next 20 years
AI and Automation
47%
Oxford University

ZOOM PIZZA
AMAZON
NEWS

How Companies Around the World Are Using Artificial Intelligence

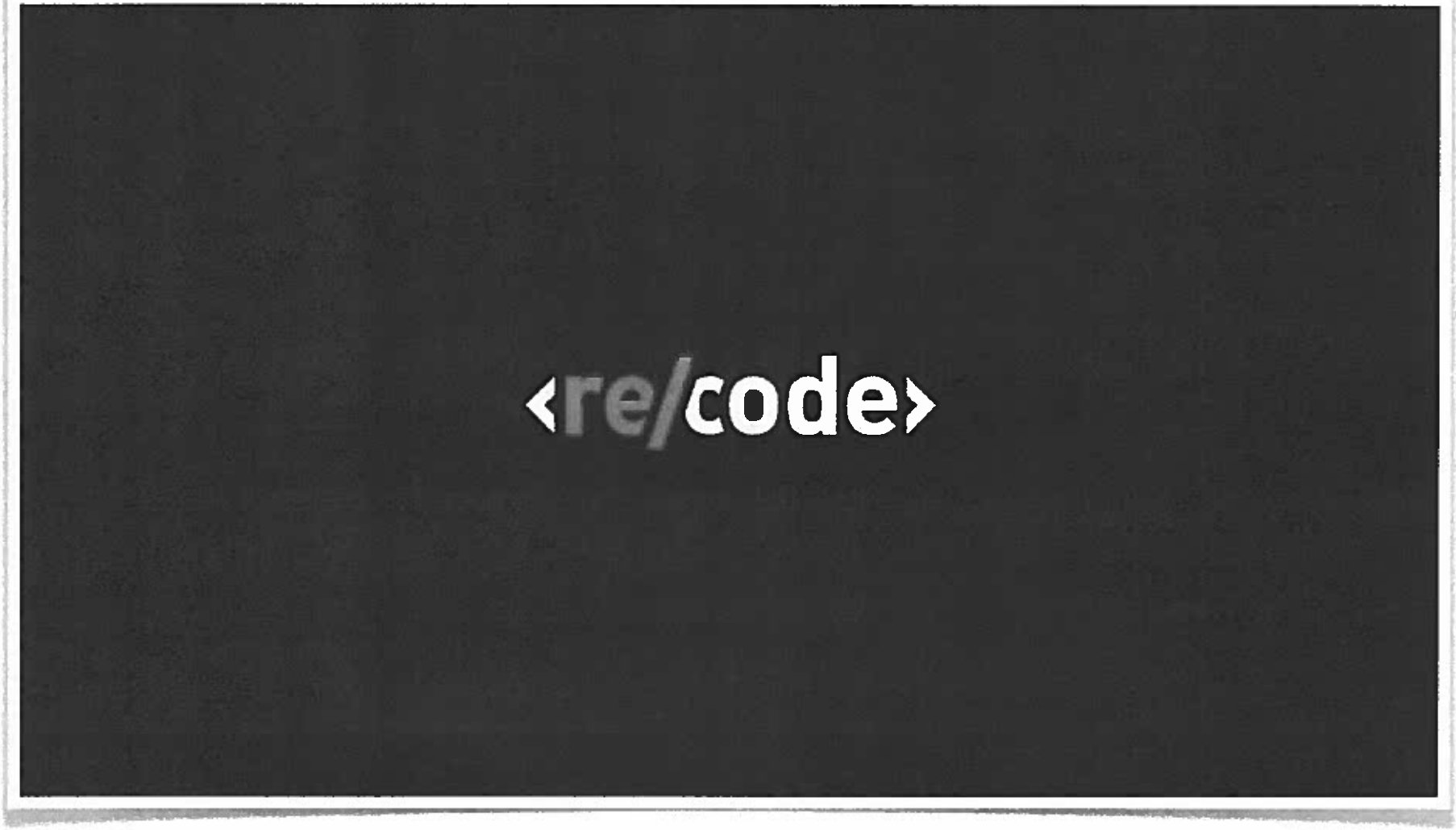
IT activities are the most popular.



SOURCE TATA CONSULTANCY SERVICES SURVEY OF 835 COMPANIES, 2017

© HBR.ORG

21st Century Economic CRISIS


‹re/code›

rural students urban students students of poverty

girls

who is at risk

students of color
(Hispanics and African-Amaricans)

Two sides, with no middle:

1. part of the problem
2. part of the solution

SO

how do we fix it.

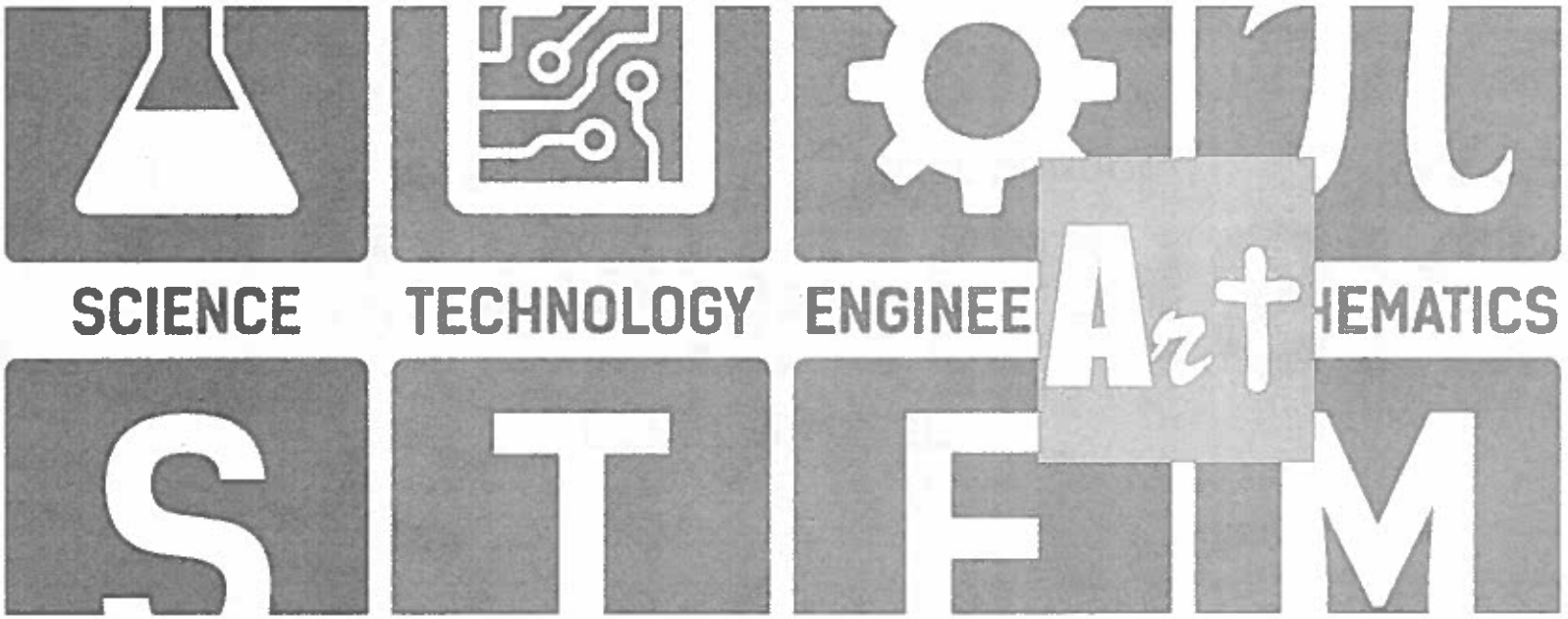
Start in the early grades

PERSONALIZED

STEM IMMERSION

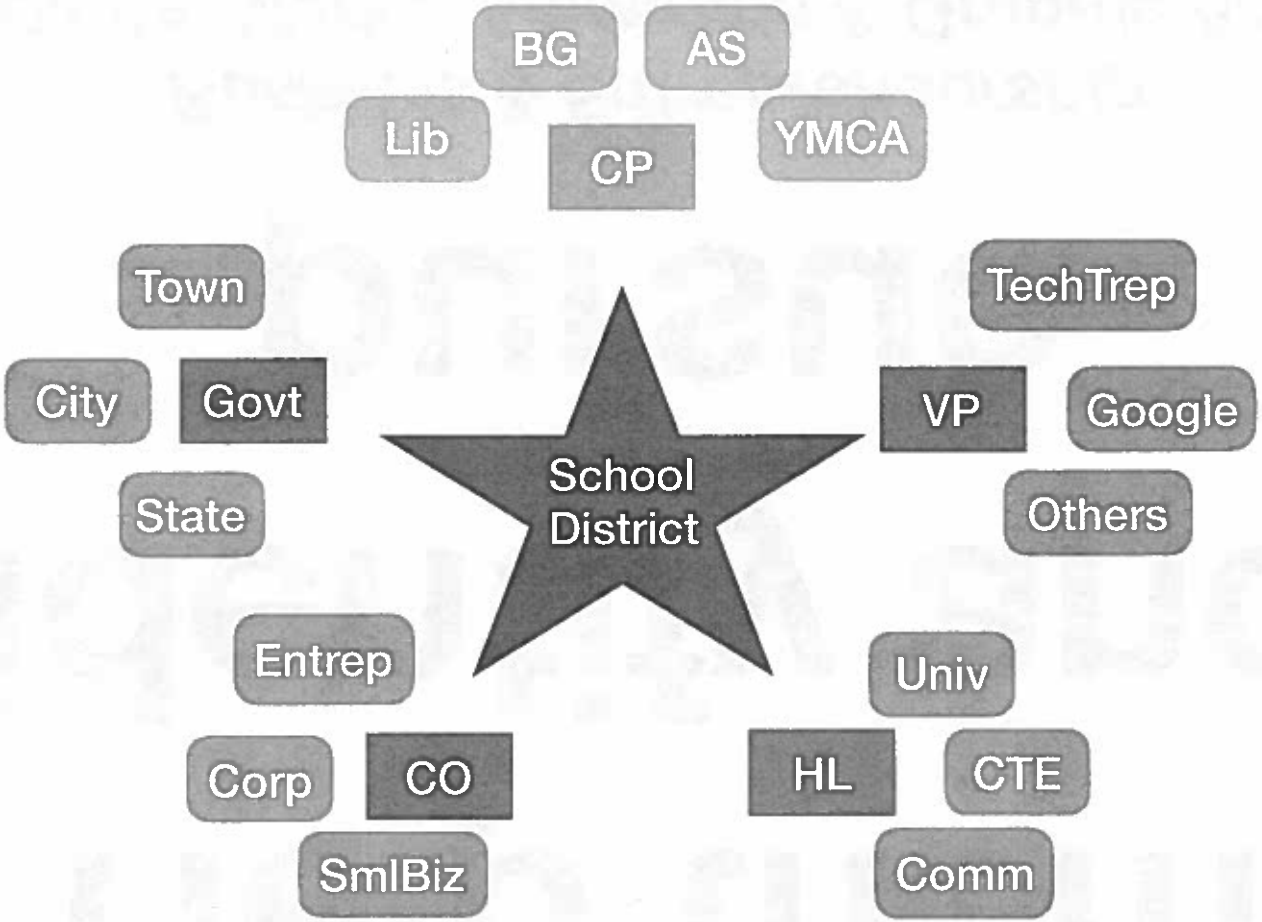
Project-based In School After School Out of School

A
Comprehensive



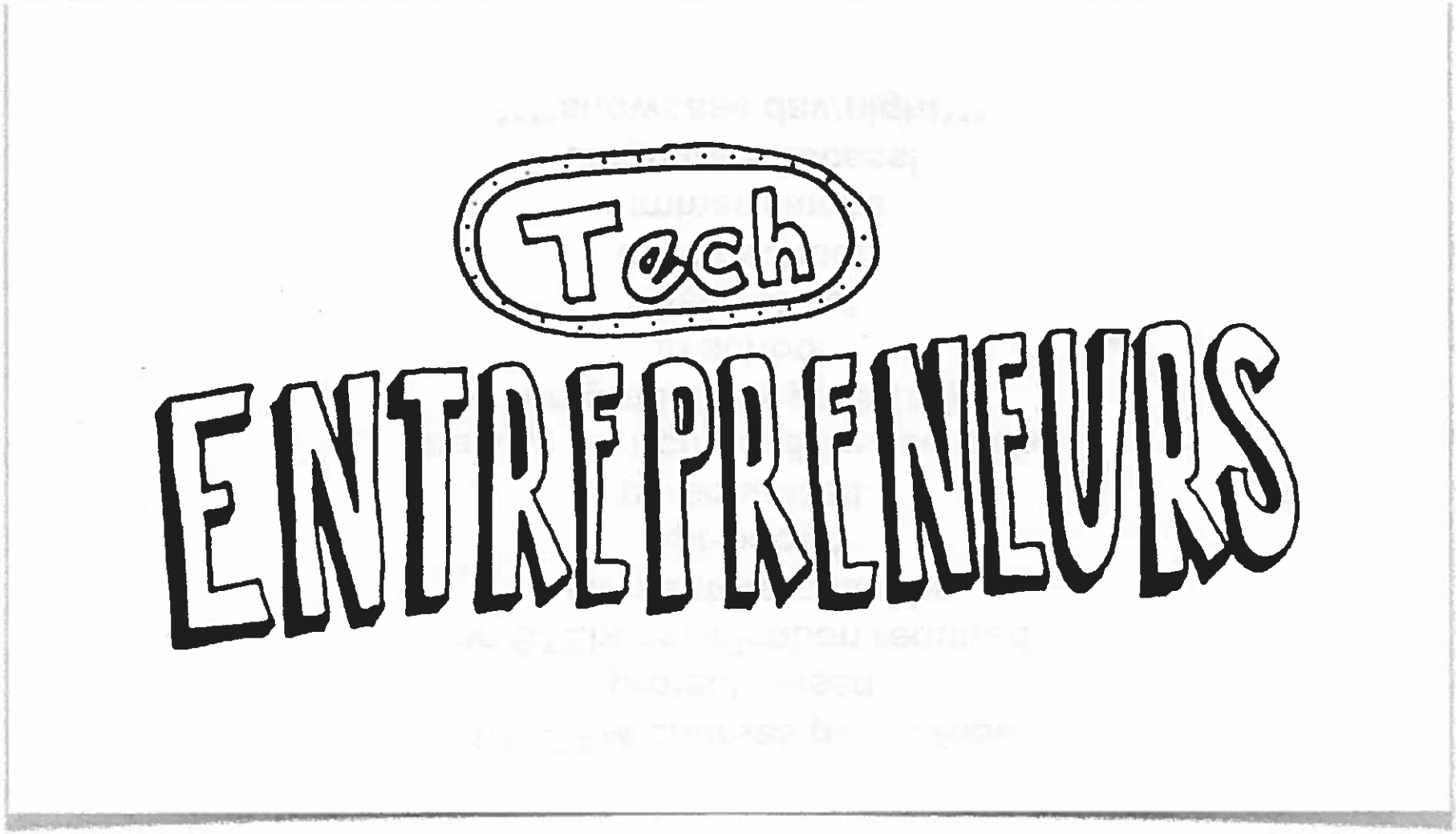
education ecosystem

COLLECTIVE IMPACT

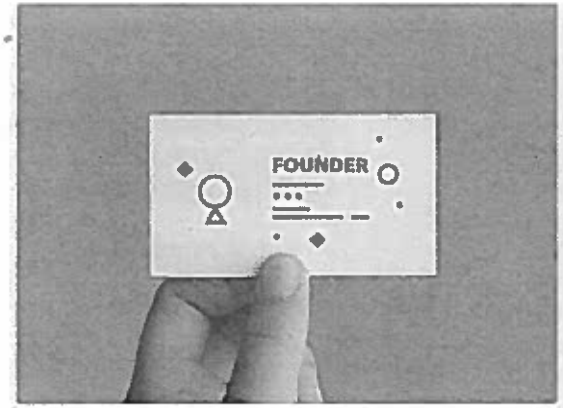


Help them identify and pursue

Business & Entrepreneurship
Digital Media, Animation & Graphic Arts
Programming, Coding and Gaming
Robotics & Engineering


Tech
ENTREPRENEURS

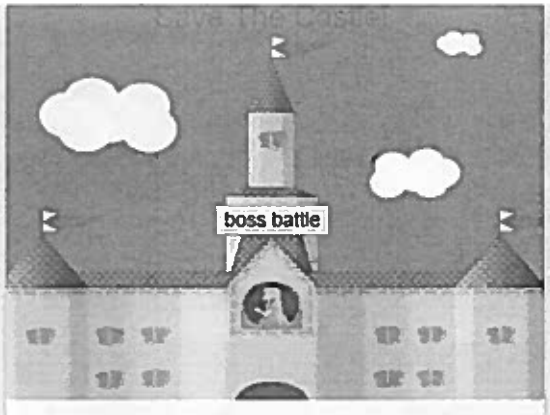
18 STEM courses per license
project-based
no STEM certification required
just mentors/coaches
self-paced
personalized
built-in curriculum & lesson plans
no grades (or pass/fail)
in school
after-school
out of school
summer camps
ubiquitous access!
****showcase day/night***



BECOME A TREP

SEE DETAILS

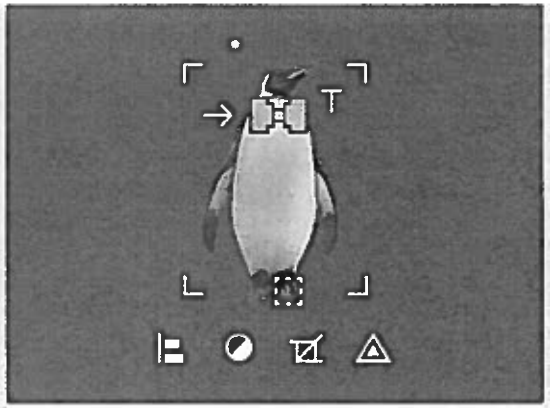
Level: **Ages 8+** Estimated Duration: 15-20 weeks



BROWSER GAME PROGRAMMING WITH JAVASCRIPT

SEE DETAILS

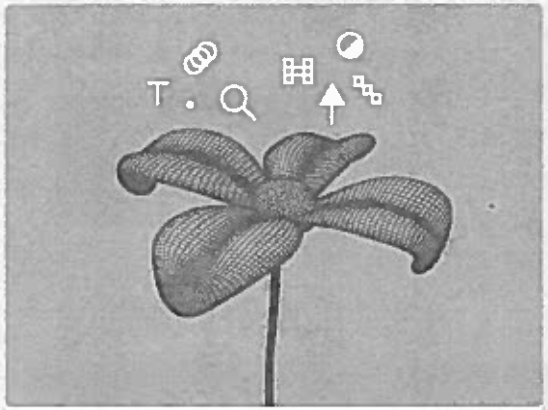
Level: **Ages 11+** Estimated Duration: 15-20 weeks



DIGITAL MEDIA EDITING AND GRAPHIC DESIGN

SEE DETAILS

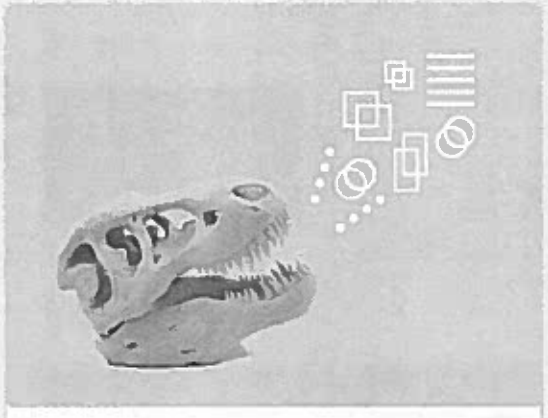
Level: **Ages 11+** Estimated Duration: 15-20 weeks



3D DESIGN AND ANIMATION

SEE DETAILS

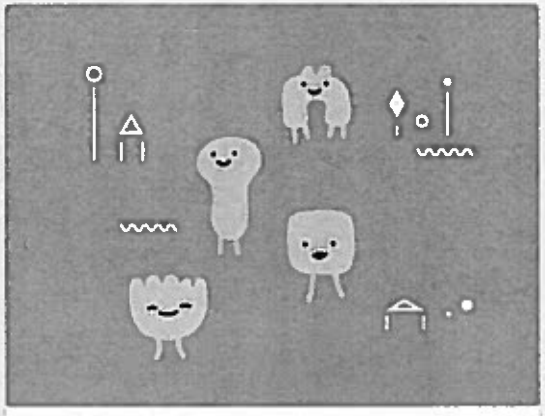
Level: **Ages 11+** Estimated Duration: 15-20 weeks



3D PRINTING AND DESIGN

SEE DETAILS

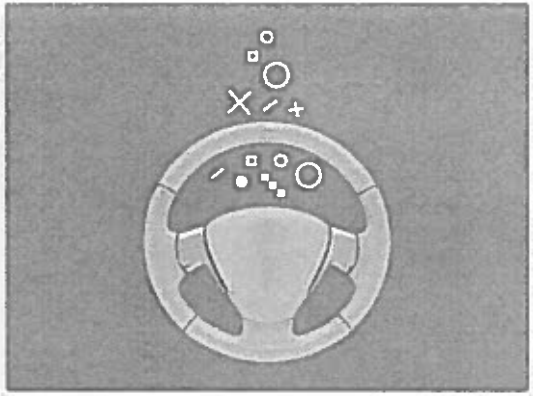
Level: **Ages 11+** Estimated Duration: 15-20 weeks



BECOME A DIGITAL ARTIST

SEE DETAILS

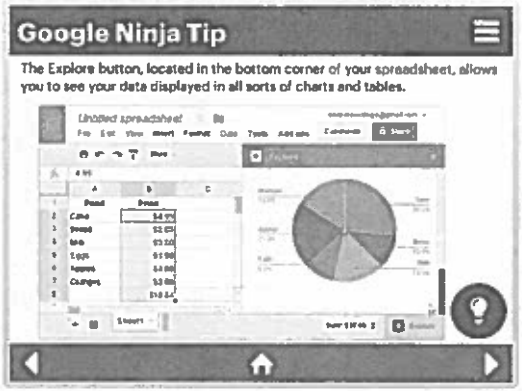
Level: **Ages 11+** Estimated Duration: 15-20 weeks



GAME DESIGN AND DEVELOPMENT

SEE DETAILS

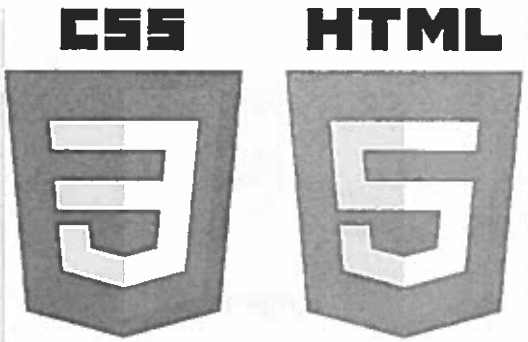
Level: **Ages 11+** Estimated Duration: 15-20 weeks



GOOGLE NINJA

SEE DETAILS

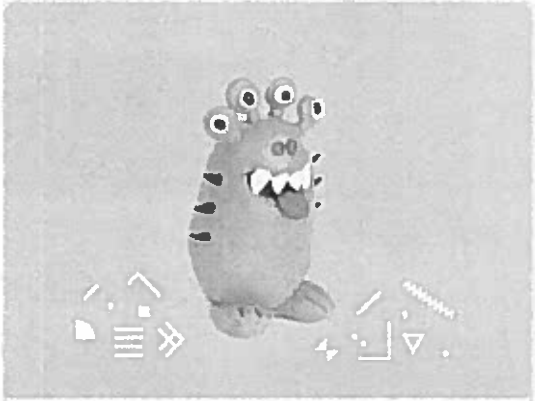
Level: **Ages 11+** Estimated Duration: 15-20 weeks



INTRO TO WEB DEVELOPMENT

SEE DETAILS

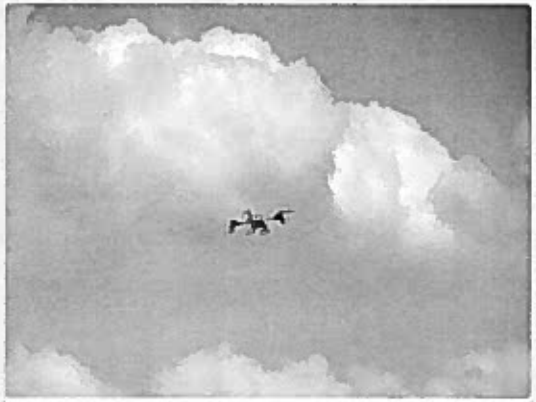
Level: **Ages 11+** Estimated Duration: 15-20 weeks



DRAWING, SCULPTING AND STOP-MOTION ANIMATION

SEE DETAILS

Level: **Ages 8+** Estimated Duration: 15-20 weeks



DRONE VIDEOGRAPHY

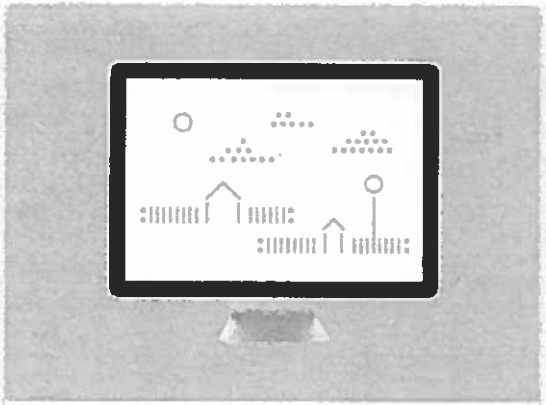
SEE DETAILS

Level: **Ages 11+** Estimated Duration: 15-20 weeks

FINANCIAL LITERACY FOR YOUTH

SEE DETAILS

Level: **Ages 11+** Estimated Duration: 15-20 weeks



PROGRAMMING FOUNDATIONS

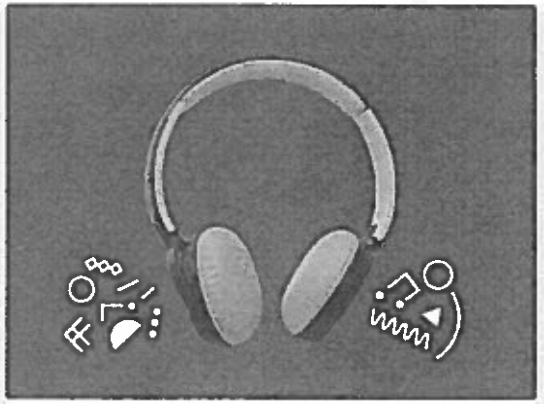
SEE DETAILS

Level: **Ages 8+** Estimated Duration: 15-20 weeks

ROBOTICS FOUNDATIONS LEGO WEDO 2.0

SEE DETAILS

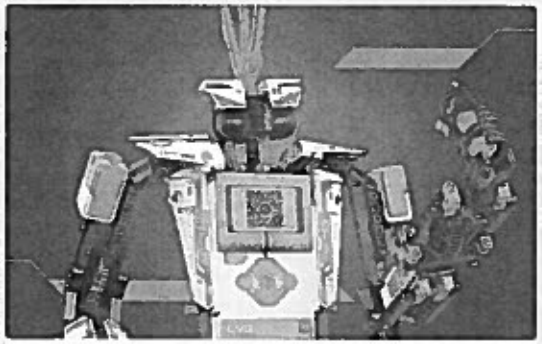
Level: **Ages 8+** Estimated Duration: 15-20 weeks



SOUND AND AUDIO MIXING

SEE DETAILS

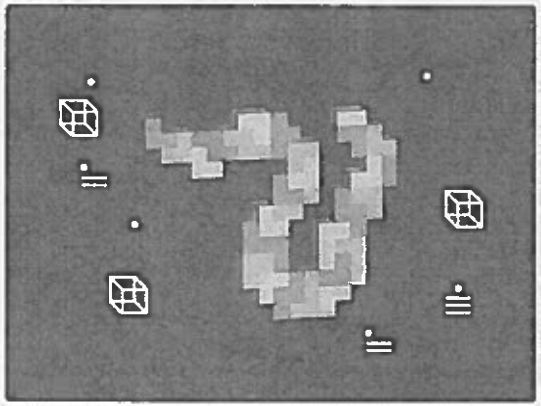
Level: **Ages 11+** Estimated Duration: 15-20 weeks



LEGO ROBOTICS EV3

SEE DETAILS

Level: **Ages 11+** Estimated Duration: 15-20 weeks



MINECRAFT MODDING WITH JAVA

SEE DETAILS

Level: **Ages 11+** Estimated Duration: 15-20 weeks

MINECRAFT STEAM FOUNDATIONS

SEE DETAILS

Level: **Ages 8+** Estimated Duration: 15-20 weeks